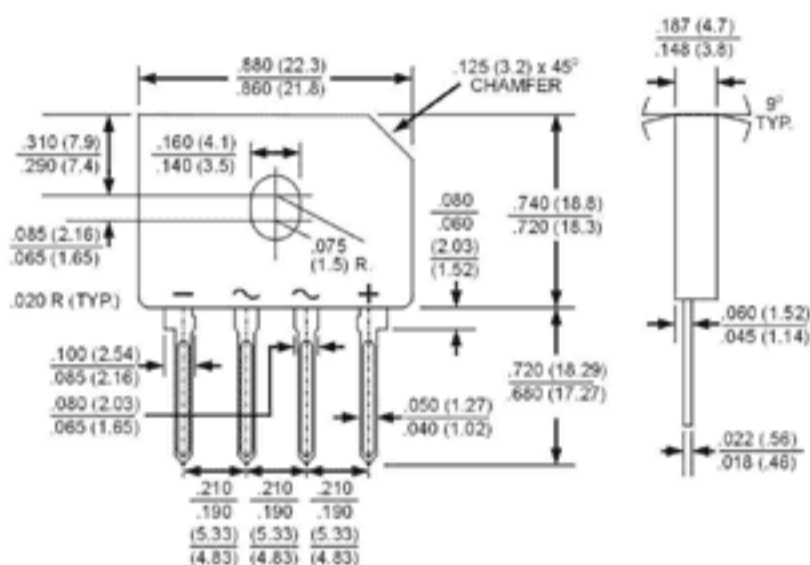


**SILICON BRIDGE RECTIFIERS**
**REVERSE VOLTAGE - 50 to 1000 Volts**  
**FORWARD CURRENT - 8.0 Amperes**
**FEATURES**

- Surge overload rating - 200 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has Underwriters Laboratory Flammability classification 94V-0
- Mounting Position: Any



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C=100^\circ C$ (with heatsink Note 2) @ $T_C=100^\circ C$ (without heatsink)	$I_{AV}$					8.0			A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	$I_{FSM}$					200			A
Maximum Forward Voltage at 4.0A DC	$V_F$					1.0			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^\circ C$ @ $T_J=125^\circ C$	$I_R$					5.0			$\mu A$
$I^2 t$ Rating for fusing ( $t < 8.3ms$ )	$I^2 t$					166			$A^2 S$
Typical Junction Capacitance per element (Note 1)	$C_J$					60			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$					2.2			$^\circ C/W$
Operating Temperature Range	$T_J$					-40 to +125			$^\circ C$
Storage Temperature Range	$T_{STG}$					-40 to +125			$^\circ C$

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.